UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/592,968	10/31/2006	Daniel Lecomte	27592-01115-US	4070

30678 7590 12/22/2010

CONNOLLY BOVE LODGE & HUTZ LLP
1875 EYE STREET, N.W.
SUITE 1100
WASHINGTON, DC 20006

EXAMINER	
DOAN, TRANG T	

ART UNIT	PAPER NUMBER
2431	

MAIL DATE	DELIVERY MODE
12/22/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/592,968	LECOMTE ET AL.	
	Examiner	Art Unit	
	TRANG DOAN	2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 9-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 9-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 09/27/2010.

2. Claims 1-3, 9, 15-27 and 31 have been amended.

3. Claims 35-46 have been added.

4. Claim 8 has been canceled.

5. Claims 1-7 and 9-46 are pending for consideration.

Response to Arguments

6. Applicant's arguments filed on 9/27/2010 have been fully considered but they are not persuasive. Applicant argues on page 17 of the Remarks that Dawson fails to teach the extraction/replacement of data at random (or pseudorandomly) in a system/method in which the modified stream and the complementary information are transmitted separately. Examiner respectfully disagrees with applicant's argument. Dawson does disclose the extraction/replacement of data at random (or pseudorandomly) in a system/method in which the modified stream and the complementary information are transmitted separately (Dawson: see figure 6A: steps 603 and 605 and column 8 lines 41-44). In accordance with steps 603 and 605 and the cited portion, Dawson discloses the process of extracting a video content from a video signal randomly and replacing the extracted video with marred content. Therefore, the above cited portion does disclose the extraction/replacement of data at random as recited in applicant's claims. Dawson further discloses transmitting the extracted video signal content (i.e., complementary

information) and video signal portion that contain marred video content (i.e., modified stream) separately (Dawson: column 5 lines 30-43).

7. Applicant further argues on page 18 of the Remarks that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Dawson discloses the extraction/replacement of data at random but not pseudorandomly. However, Motta discloses the extraction step at pseudorandomly (Motta: paragraph 0030). Therefore, it is appropriated to include in Dawson the extraction of data at pseudorandomly of Motta to extract the data at pseudorandomly instead of random.

8. Regarding claims 2-3, 9-10, 12-14, 17-19, 23, 25-26, 31-32 and 34, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-7, 9-11, 13, 15-22, 24-33 and 35-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson (US 7382969) (hereinafter Dawson) in view of Motta et al. (US20040221192) (hereinafter Motta), and further in view of Lengyel et al. (US6606095) (hereinafter Lengyel).

Regarding claims 1, 15, 16, 20, 24 and 44, Dawson discloses analyzing the succession of frames of the original stream, using an analysis module, to generate a main stream and complementary information, separately forwarding the modified main stream and the complementary information to equipment at an addressee (Dawson: Dawson: see figure 6A: steps 603 and 605; column 5 lines 56-67; column 6 lines 1-10; and column 8 lines 41-44), wherein analyzing the original stream comprises: generating data comprising sequences of random values with known parameters (Dawson: column 8 lines 35-44: blocks of censored content (e.g., extracted video signal content 405) may be extracted at random), extracting original data from the original stream and replacing extracted original data with replacement data as a function of the values of the one or more sequences of random values, to produce a modified main stream (Dawson: column 4 lines 50-67; column 5 lines 1-15: extracted from a video signal and replaced

with marred content; and column 8 lines 41-44), and storing in the complementary information data associated with at least one of the sequences of random values and at least some of the extracted original data (Dawson: column 5 lines 25-27; and column 7 lines 35-40).

Dawson discloses the generating, extracting, and storing step using sequences of random values not pseudorandom values. However, Motta discloses the generating, extracting, and storing steps using pseudorandom values (Motta: paragraph 0030). Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to have included in Dawson the feature of Motta as discussed above to secure a transmission in a public communication network.

Dawson in view of Motta discloses reconstructing a stream in the original format at the addressee, as a function of the modified main stream and the complementary information (Dawson: column 5 lines 56-67; and column 6 lines 1-10). Dawson in view of Motta does not disclose a synthesis module. However, Lengyel discloses the synthesis module for a stream (Lengyel: column 19 lines 34-42). Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to have included in Dawson in view of Motta the feature of Lengyel so that the original stream can be reconstructed.

Regarding claims 2 and 25, Dawson as modified by Motta and Lengyel discloses wherein all the data comprising the sequences of pseudorandom values and the

extracted original data is stored in the complementary information (Dawson: column 5 lines 25-27; and column 7 lines 35-40).

Regarding claims 3 and 26, Dawson as modified by Motta and Lengyel discloses wherein some of the data comprising the sequences of pseudorandom values and the extracted original data is stored in the complementary information (Dawson: column 5 lines 25-27; and column 7 lines 35-40).

Regarding claims 4 and 27, Dawson as modified by Motta and Lengyel discloses wherein the pseudorandom values represent information relative to at least one characteristic of the original data extracted from the original stream (Motta: paragraph 0030).

Regarding claims 5 and 28, Dawson as modified by Motta and Lengyel discloses wherein the pseudorandom values represent information relative to the position of the original data extracted from the original stream (Motta: paragraph 0030).

Regarding claims 6 and 29, Dawson as modified by Motta and Lengyel discloses wherein at least some of the extracted original data is random (Dawson: column 8 lines 35-44).

Regarding claims 7 and 30, Dawson as modified by Motta and Lengyel discloses wherein the data include original data extracted from the original stream (Dawson: column 9 lines 26-62).

Regarding claims 9 and 31, Dawson as modified by Motta and Lengyel discloses wherein generating one or more sequences includes generating one or more sequences based on at least one characteristic of the analyzing (Dawson: column 9 lines 26-62).

Regarding claims 10 and 32, Dawson as modified by Motta and Lengyel discloses storing one or more parameters related to the generating as a result of the analyzing (Dawson: column 7 lines 11-17).

Regarding claims 11 and 33, Dawson as modified by Motta and Lengyel discloses wherein forwarding one or more parameters related to the analyzing to the equipment at the addressee (Dawson: column 5 lines 55-67).

Regarding claim 13, Dawson as modified by Motta and Lengyel discloses wherein synthesizing includes using said data reproducing the pseudorandom values obtained during the analyzing (Dawson: column 10 lines 3-29).

Regarding claim 17, Dawson as modified by Motta and Lengyel discloses wherein the analysis apparatus includes: a generator to generate the at least one sequence of pseudorandom values, and an extractor responsive a sequence of pseudorandom values for extracting original data from original audiovisual sequences to produce said modified main stream and said complementary information (Dawson: column 5, lines 30-33 and column 4 lines 60-67).

Regarding claim 18, Dawson as modified by Motta and Lengyel discloses the extractor produces said complementary information comprising at least some of said extracted original data and at least one sequence of said pseudorandom values (Dawson: column 8 lines 35-44).

Regarding claim 19, Dawson as modified by Motta and Lengyel discloses the extractor produces said complementary information comprising all said extracted original data (column 5, lines 30-33).

Regarding claim 21, Dawson as modified by Motta and Lengyel discloses said receiving includes receiving the modified main stream and the complementary information from a telecommunication network (Dawson: column 1 lines 15-18).

Regarding claim 22, Dawson as modified by Motta and Lengyel discloses said receiving includes receiving only the modified main stream from a telecommunication

network and said complementary information is received from an information carrier (Dawson: column 2 lines 62-67).

Regarding claims 35 and 38, Dawson as modified by Motta and Lengyel discloses wherein said analyzing further comprises randomly selecting one or more parameter values used in generating the one or more sequences of pseudorandom values (Motta: paragraph 0030).

Regarding claims 36 and 39, Dawson as modified by Motta and Lengyel discloses wherein said randomly selecting comprises randomly selecting the one or more parameter values on a periodic basis (Motta: paragraph 0030).

Regarding claims 37 and 40, Dawson as modified by Motta and Lengyel discloses wherein the data associated with at least one of the sequences of pseudorandom values includes the at least one or more parameter values (Motta: paragraph 0030).

Regarding claims 41 and 42, Dawson as modified by Motta and Lengyel discloses wherein said analyzing further comprises randomly selecting at least one of the known parameters (Dawson: see Abstract section).

Regarding claim 43, Dawson as modified by Motta and Lengyel discloses wherein the data associated with at least one of the sequences of pseudorandom values includes at least one of the known parameters (Motta: paragraph 0030).

Regarding claim 45, Dawson as modified by Motta and Lengyel discloses periodically randomly-selecting at least one of the randomly-selected parameter values (Dawson: see figure 6A: steps 603 and 605 and column 8 lines 41-44).

Regarding claim 46, Dawson as modified by Motta and Lengyel discloses wherein the information to enable reconstruction includes at least one of the randomly-selected parameter values (Dawson: see figure 6A: steps 603 and 605 and column 8 lines 41-44).

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson in view of Motta in view of Lengyel, and further in view of Ferris (US 2003/0177142) (hereinafter Ferris).

Regarding claim 14, Dawson in view of Motta and Lengyel does not disclose wherein the processing is lossless. However, Ferris discloses wherein the processing is lossless (Ferris: paragraphs 0035 and 0041-0043). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have included in Dawson in view of Motta and Lengyel the feature of Ferris as

discussed above because efficient use of bandwidth without excessive complexity is desirable. Traditionally, DAB high-level protocols (e.g., FIGs, TPEG, etc.) have been parsimonious about resource usage, but at the cost of complexity. The BDB application should aim for simplicity, whilst still providing efficient use of resources. This strongly suggests the use of high-level lossless compression technologies (Ferris: paragraph 0035).

12. Claims 12, 23 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson in view of Motta in view of Lengyel, and further in view of Hopkins (US20050139657) (hereinafter Hopkins).

Regarding claims 12, 23 and 34, Dawson in view of Motta and Lengyel does not disclose wherein said complementary information is received from a smart card. However, Hopkins discloses wherein said complementary information is received from a smart card (Hopkins: paragraphs 0014 and 0016). Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to have included in Dawson in view of Motta and Lengyel the feature of Hopkins as discussed above for supporting a different way to transport the complementary information conveniently and efficiently to the receiver.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRANG DOAN whose telephone number is (571)272-0740. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Trang Doan/
Examiner, Art Unit 2431

/Kaveh Abrishamkar/

Primary Examiner, Art Unit 2431